



DEPARTMENT OF ENVIRONMENTAL QUALITY

KATHLEEN BABINEAUX BLANCO

GOVERNOR

MIKE D. McDANIEL, Ph.D.

SECRETARY

CERTIFIED MAIL 7004 1160 0000 3793 8324
RETURN RECEIPT REQUIRED

Mr. Don Bleile
SHAC Production Leader
St. Charles Operations
Union Carbide Corporation
P.O. Box 50
Hahnville, LA 70079

RE: Union Carbide Corporation (UCC)
LAR 000 004 598
AI# 25156 / PER 20050002
Request for Variance from Classification as a Solid Waste
Additional Tolling Company to Process Crude Orthochlorotoluene (COCT) from
UCC's Norco, LA facility

Dear Mr. Bleile:

The Water and Waste Permits Division is in receipt of your submittal dated November 2, 2005, requesting a change to the terms and conditions of a variance from the classification of COCT as a solid waste that was issued on February 12, 1996. According to the information submitted your facility is requesting to perform the reclamation process at Mid-America Distillations, Inc (MADI) in Hot Springs, Arkansas. COCT recovery is currently performed at Texas Molecular in Deer Park, TX and UCC wishes to have two facilities perform this service under equivalent competitive criteria. In the submittal, UCC proposed that a new variance be issued to include the additional reclamation facility. The variance was tentatively approved on December 13, 2005, and a public comment period was initiated beginning December 22, 2005 and ending on January 25, 2006. No comments were received before the end of the public comment period.

After careful review and consideration of your submittal, the Water and Waste Permits Division approves your request. Please see the enclosed final variance and basis for decision for the terms and conditions of this approval.

ENVIRONMENTAL SERVICES

: PO BOX 4313, BATON ROUGE, LA 70821-4313

P:225-219-3181 F:225-219-3309

WWW.DEQ.LOUISIANA.GOV

Mr. Bleile
AI# 25156 / PER20050002
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Please reference your Agency Interest No. (25156), Facility Identification No. (LAR 000004598), and Permit Activity Number PER 20050002 on all future correspondence pertaining to this matter. If you have any questions, please contact Ms. Holly Maynard, Water and Waste Permits Division at (225) 219-3089.

Sincerely,

A handwritten signature in black ink, appearing to read 'C Carr Brown', with a stylized flourish at the end.

Chuck Carr Brown, Ph.D.
Assistant Secretary

hrm

Attachments

c: OEC-ENF
Troy Hill- USEPA-Region 6
LDEQ- Southeast Regional Office

PUBLIC NOTICE
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY (LDEQ)
UNION CARBIDE CORPORATION
FINAL APPROVAL OF A REQUEST
FOR VARIANCE FROM CLASSIFICATION AS A SOLID WASTE

The LDEQ, Office of Environmental Services, has made the decision to issue the variance from classification as a solid waste for Union Carbide Corporation, P.O. Box 518 , Norco , LA 70079 for the Spent Orthochlorotoluene (OCT) from the SHACAT[®] Unit. **The facility is located at 16122 River Rd, in Norco, St. Charles Parish.**

Under this variance permit, Union Carbide will recycle spent orthochlorotoluene (OCT) and reuse it as a feedstock.

The final permitting action and related documents are available for review and copying (all documents copied will be subject to a \$0.25 charge per copied page) at the LDEQ, Public Records Center, Room 127, 602 North 5th Street, Baton Rouge, LA. Viewing hours are from 8:00 a.m. to 4:30 p.m., Monday through Friday (except holidays). An additional copy is available for review at the Saint Charles Parish Library, Norco Branch, 197 Good Hope Street, Norco, LA 70079.

In accordance with Louisiana Revised Statutes (La R.S.) 30:2024, the Permittee may file with the secretary a request for a hearing no later than thirty (30) days after the notice of the action is served. Under La. R.S. 30:2050.21, any person aggrieved by a final permit action may appeal to the Nineteenth Judicial District Court within 30 days after the notice of the action has been given.

Previous notices have been published in the The Advocate on December 21, 2005 and in Saint Charles Herald-Guide December 22, 2005.

Inquiries or requests for additional information regarding this permit action, should be directed to Holly Maynard, LDEQ, Permits Division, P.O. Box 4313, Baton Rouge, LA 70821-4313, phone (225) 219-3089.

Persons wishing to be included on the LDEQ permit public notice mailing list or for other public participation related questions should contact the Public Participation Group in writing at LDEQ, P.O. Box 4313, Baton Rouge, LA 70821-4313, by email at maillistrequest@ldeq.org or contact the LDEQ Customer Service Center at (225) 219-LDEQ (219-5337).

Permit public notices including electronic access to the issued permit and associated information can be viewed at the LDEQ permits public notice webpage at www.deq.state.la.us/news/PubNotice/ and general information related to the public participation in permitting activities can be viewed at www.deq.louisiana.gov/portal/tabid/2198/Default.aspx

Alternatively, individuals may elect to receive the permit public notices via email by subscribing to the LDEQ permits public notice List Server at http://www.state.la.us/ldbc/listservpage/ldeq_pn_listserv.htm.

All correspondence should specify AI Number 25156, Permit Number LAR 000 004 598, and Activity Number PER20050002.

Publication date: Thursday, March 30, 2006

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**STATE OF LOUISIANA
DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER AND WASTE PERMITS DIVISION**

VARIANCE FROM CLASSIFICATION AS A SOLID WASTE

ISSUED TO:

**UNION CARBIDE CORPORATION
LAR 000 004 598
NORCO, LOUISIANA**

The following **VARIANCE** is issued to **UNION CARBIDE CORPORATION CYPRESS PLANT** by the Louisiana Department of Environmental Quality (LDEQ) under authority granted by the Louisiana Environmental Quality Act, in particular La. R.S. 30:2014; by the Executive Reorganization Act, in particular La. R.S. 36:234; and by Section 105.O.1.b of Title 33, Part V of the Louisiana Administrative Code (LAC 33:V.105.O.1.b).

This variance excludes recycled orthochlorotoluene from classification as solid waste and thereby exempts this material from regulation as hazardous waste.

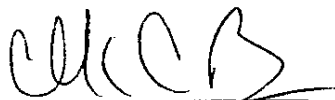
This variance is contingent on Union Carbide having this material reclaimed and reusing it as feedstock in a manner consistent with representations made in Shell's variance request of October 19, 1995 and Union Carbide's variance request of November 2, 2005. This variance was originally issued to Shell Polypropylene Company on February 12, 1996. Subsequently, Union Carbide purchased Shell's polypropylene business and operations at the Cypress Plant. As before, this variance may be transferred to a new owner or operator if such person respects these conditions.

Pursuant to LAC 33:V.105.O.1.b.v, the Administrative Authority's approval of a feedstock variance is based in part on the location of the reclamation operation in relation to the production process. Therefore, in the event that the location of the reclamation operation should change, Union Carbide must obtain prior written approval from the Administrative Authority. This variance is not contingent upon any specific reclamation facility and need not be reissued provided that the reclamation operation is executed in the manner that has been previously approved.

This variance is effective as of the date signed and shall remain in effect unless suspended, modified, revoked and reissued, or terminated for just cause. This variance implies no variance outside of Louisiana.

This variance does not act retroactively and does not excuse any earlier failure to comply with hazardous waste storage or notification requirements.

This variance requires that Union Carbide act at all times to minimize losses of orthochlorotoluene and to minimize environmental impact from the reclamation cycle.


Chuck Carr Brown, Ph.D.
Assistant Secretary

3/17/06
Date

BASIS FOR DECISION

VARIANCE FROM CLASSIFICATION AS A SOLID WASTE

UNION CARBIDE CORPORATION

LAR 000 004 598

Union Carbide Corporation of Norco has petitioned the Louisiana Department of Environmental Quality (LDEQ) for a feedstock variance allowed under Section 105.O.1.b of Title 33, Part V of the Louisiana Administrative Code (LAC 33: V.105.O.1.b). Such variance has the effect of excluding certain materials from classification as solid wastes, and thereby exempts them from regulation as hazardous wastes. For reasons explained below, the Louisiana Department of Environmental Quality proposes to grant the variance.

Union Carbide operates a SHACAT® Unit which produces a catalyst used in the manufacture of polypropylene. A Titanium Tetrachloride Production Facility (TPF) recovers a mixed stream of monochlorobenzene and titanium tetrachloride and recycles it back into the catalyst production process. Orthochlorotoluene (OCT) is used in the recovery process to keep the heavier constituents in solution. To reduce the cost of purchasing fresh OCT and to minimize waste generation, arrangement was made with a third party processing firm (MADI) to reclaim crude OCT. The reclamation process was successful, eliminating the need to incinerate the waste OCT and enabling recovery/reuse of most of the OCT.

This variance, if granted, will allow Union Carbide to recycle and reuse the OCT, a spent material, as feedstock without having to manage it as a hazardous waste. The COCT would otherwise be classified as

LAC 33: V.105.O.1.b authorizes the secretary to determine that some recycled materials are not solid wastes. The regulation states

The administrative authority may grant requests for a variance from classifying as a solid waste those materials that are reclaimed and then reused as feedstock within the original primary production process in which the materials were generated if the reclamation operation is an essential part of the production process. This determination will be based on the following criteria:

- i. how economically viable the production process would be if it were to use virgin materials, rather than reclaimed materials;**
- ii. the prevalence of the practice on an industry-wide basis;**
- iii. the extent to which the material is handled before reclamation to minimize loss;**
- iv. the time periods between generating the material and its reclamation and between reclamation and return to the original primary production process;**

v. the location of the reclamation operation in relation to the production process;

vi. whether the reclaimed material is used for the purpose for which it was originally produced when it is returned to the original process, and whether it is returned to the process in substantially its original form;

vii. whether the person who generates the material also reclaims it; and

viii. other relevant factors.

The LDEQ has based this decision, as required, on the above standards and criteria. Each criterion is applied below:

i. how economically viable the production process would be if it were to use virgin materials, rather than reclaimed materials;

While the production process is economically viable using virgin materials, the overall economics are improved by reusing OCT. The cost of virgin raw material OCT is \$0.55/lb. The cost associated with using recycled OCT is \$0.45/lb.

ii. the prevalence of the practice on an industry-wide basis;

Union Carbide is one of the only facilities worldwide that utilizes this particular primary production process, therefore it is unknown how prevalent this specific practice is on an industry-wide basis. However, reuse of secondary materials is a common procedure in the chemical manufacturing industry.

iii. the extent to which the material is handled before reclamation to minimize loss;

Union Carbide handles this material as a valuable commodity and a dangerous chemical. Closed-dome procedures are used for all loading and unloading operations. The COCT is loaded directly from the generating unit tanks into a dedicated tank truck. The tank truck proceeds directly to the reclamation facility (TM or MADI). Upon arrival it is transferred directly into the processing unit to be refined into product grade OCT. After this reclaiming process, the OCT is transferred directly into dedicated product OCT tank truck trailers and transported back to the generating unit. Upon arrival at UCC, the raw material is unloaded from the truck into the raw material tank to be fed back into the process. The dedicated COCT tank truck trailer is transported back to the generating unit and refilled with COCT. In summary, all handling procedures for this material takes place in closed trailers, tanks, and equipment in order to prevent loss to the environment.

iv. the time periods between generating the material and its reclamation and between reclamation and return to the original primary production process;

Reclamation activities begin within 24-48 hours after generation. The material will be reclaimed as soon as the material arrives at either reclamation facility. After reclamation, the OCT is returned to the UCC original primary production unit with 24-48 hours of loading on a truck. The entire process from COCT generation to delivery of the reclaimed OCT will usually be within a 10 day period.

v. the location of the reclamation operation in relation to the production process;

The production process takes place in Norco, Louisiana. The reclamation and purification process occurs in either Hot Springs, Arkansas (500 miles away) or Deer Park, Texas (350 miles away).

vi. whether the reclaimed material is used for the purpose for which it was originally produced when it is returned to the original process, and whether it is returned to the process in substantially its original form;

The reclaimed material, OCT, is used for the same purpose for which it was originally produced. It is returned to the process in substantially its original form.

vii. whether the person who generates the material also reclaims it;

Union Carbide Corporation generates the COCT. UCC has a toll agreement with the reclaimers MADI and TM, for the processing and return of the reclaimed OCT. UCC retains title and ownership of the material. Neither MADI nor TM is otherwise affiliated with UCC.

viii. other relevant factors.

- Consistent with the goals of waste minimization, this process has been expanded to enable recovery of valuable feedstock materials for reuse, thereby reducing requirements for raw materials and eliminating the need for incineration.
- This type of recycling does not meet the strictest definition of waste reduction as found in LAC 33:V.109, which is the Louisiana DEQ's highest priority in regulating waste management. However, Shell was previously incinerating this material when it managed this system. Using an off-site reclaiming facility to create a closed-loop system deserves encouragement.
- La. R.S. 30:2014 requires that the secretary consider a company's compliance history in considering any variance petition. The facility summary for Union Carbide is attached.

Overall, the proposed variance will serve to minimize risk and environmental impact. It will produce both environmental and economic benefits. We find no alternative measures which will better serve to protect health and the environment.

UNION CARBIDE
AI# 25156/ EPA ID # LAR 000 004 598
COMPLIANCE HISTORY

Parish	Master AI Id	ENF Number	Master AI Name	Resp Entity Name	ENF Type	Issued Date	Penalty Amount	Program Desc
St. Charles	25156	HECV030046	Union Carbide Norco Catalyst Plant	Union Carbide Corp	NOCV	27-Jun-03		Haz Waste
St. Charles	25156	RMPECV030031	Union Carbide Norco Catalyst Plant	Dow Chemical Co	NOCV	21-Nov-03		Air